

VIRGIN RIVER BASIN

09409100 SANTA CLARA RIVER ABOVE BAKER RESERVOIR NEAR CENTRAL, UT

LOCATION.--Lat 37°23'05", long 113°37'52", in SW^{1/4}NW^{1/4}NE^{1/4} sec. 22, T. 39 S., R. 16 W., Washington County, Hydrologic Unit 15010008, on left bank 0.6 mi downstream from Kane Spring Draw, 0.8 mi upstream from Baker Dam, 2.6 mi south of Central, Utah, and 4.0 mi north of Veyo, Utah.

DRAINAGE AREA.--116 mi².

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,875 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and discharges less than 2.0 ft³/s, which are poor. Diversion 0.5 mi upstream for power generation.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (estimated), Mar. 11, 1995, gage height, 5.79 ft, from rating curve extended above 100 ft³/s on basis of slope-area measurement at gage height 2.28 ft and velocity-area measurement at gage height 2.78 ft; minimum daily discharge, 0.13 ft³/s Aug. 15, 1991.EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 6, 1966 reached a discharge of 2,080 ft³/s, from flow over dam measurement.EXTREMES FOR CURRENT YEAR.--Maximum discharge, 276 ft³/s Jan. 3, gage height, 2.92 ft; minimum daily discharge, 0.40 ft³/s Sept. 19.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.52	.54	.42	.98	1.1	1.5	2.2	1.2	.79	.52	.50
2	.59	.58	.56	.46	1.0	1.2	1.5	1.9	1.3	.78	.50	.58
3	.63	.65	.52	66	.97	1.1	1.5	1.8	1.4	.76	.58	2.3
4	.61	.65	.48	8.3	.93	1.1	1.4	1.7	1.4	.73	.86	.53
5	.56	.57	6.8	1.2	.97	1.1	1.5	1.9	1.4	.64	.81	.45
6	.58	.52	12	.50	.94	1.2	1.3	3.2	1.4	.64	.62	.46
7	.54	.52	12	.44	.87	1.2	1.3	2.6	1.4	.64	.57	.44
8	.53	.52	11	.46	.94	1.3	1.4	2.6	1.3	.63	.54	.48
9	.49	.50	12	.44	.96	1.2	1.4	2.5	5.3	.62	.58	.52
10	.52	.47	19	.44	.96	1.0	1.3	2.2	13	.61	1.8	.53
11	.52	.46	21	.42	.91	5.8	1.3	2.0	12	.57	.90	.49
12	.53	.43	17	.43	.89	16	1.6	1.9	11	.58	.75	.50
13	.55	.41	16	.42	.86	7.3	1.6	2.1	12	.58	.68	.47
14	.56	.41	16	.42	.84	2.1	1.5	2.2	14	.57	.57	.46
15	.55	.45	14	.42	.88	1.3	1.4	2.2	16	.55	.52	9.0
16	.53	.46	16	.46	.91	1.2	1.4	2.2	8.7	.57	.52	.95
17	.53	.46	14	.44	.95	1.2	1.4	2.0	2.9	.55	.53	.48
18	.51	.47	11	.45	.93	1.1	1.4	1.9	1.2	.54	.53	.41
19	.51	.45	13	.44	.99	1.2	1.6	2.7	1.2	.55	.51	.40
20	.52	.46	7.5	.46	1.1	1.4	1.6	5.2	1.1	.55	.49	.43
21	.54	.62	.54	.46	1.0	1.6	2.1	3.5	1.1	.59	.48	.47
22	.52	19	2.5	.46	1.1	1.7	2.8	2.7	1.0	.64	.48	
23	.48	10	.47	.55	1.1	1.6	2.9	1.9	.90	.68	.47	.48
24	.49	1.9	.44	.52	1.1	1.5	2.5	1.9	.89	.62	.46	.50
25	.52	.72	.41	.52	1.1	1.5	2.5	1.9	.76	.59	.46	.55
26	.47	.65	.43	64	1.2	1.5	2.1	1.6	.77	.57	.46	71
27	.47	.60	.41	26	1.2	1.5	1.6	1.4	.76	.58	.46	30
28	.50	.57	.41	2.5	1.1	1.5	1.6	1.3	.75	.64	.47	15
29	.52	.58	.41	.99	---	1.5	1.8	1.2	.76	.65	.46	8.9
30	.48	.54	.41	.95	---	1.5	2.1	1.3	.94	.64	.48	5.4
31	.65	--	.41	.96	---	1.5	--	1.1	--	.54	.50	--
TOTAL	16.56	45.14	227.24	180.93	27.68	67.0	50.9	66.8	117.83	19.19	18.56	153.16
MEAN	.53	1.50	7.33	5.84	.99	2.16	1.70	2.15	3.93	.62	.60	5.11
MAX	.65	19	21	66	1.2	16	2.9	5.2	16	.79	1.8	71
MIN	.47	.41	.41	.42	.84	1.0	1.3	1.1	.75	.54	.46	.40
AC-FT	33	90	451	359	55	133	101	132	234	38	37	304

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	3.80	3.71	4.79	3.92	4.40	15.4	10.5	20.7	17.7	6.86	2.81	4.72
MAX	14.6	12.9	10.6	12.9	11.8	63.7	35.1	77.8	84.1	32.1	7.36	15.5
(WY)	1996	1996	1993	1993	1993	1995	1993	1993	1995	1995	1995	1995
MIN	.41	.50	.40	.55	.55	.75	.87	.47	.34	.28	.30	.40
(WY)	1992	1990	1990	1990	1990	1990	1996	1990	1996	1996	1996	1996

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1990 - 1997

ANNUAL TOTAL	496.58	990.99	8.30
ANNUAL MEAN	1.36	2.72	24.5
HIGHEST ANNUAL MEAN			1.39
LOWEST ANNUAL MEAN			1.90
HIGHEST DAILY MEAN	21	Dec 11	393
LOWEST DAILY MEAN	.26	Jul 21	Mar 11 1995
ANNUAL SEVEN-DAY MINIMUM	.26	Jul 20	.13 Aug 15 1991
ANNUAL RUNOFF (AC-FT)	985	1970	.18 Aug 14 1991
10 PERCENT EXCEEDS	1.3	6.2	19
50 PERCENT EXCEEDS	.53	.86	1.3
90 PERCENT EXCEEDS	.29	.46	.44

e Estimated